

SH

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/661,587 | 09/15/2003 | Kuo-Jung Hsu | TOP 322 | 8059 |

23995 7590 02/08/2006

RABIN & Berdo, PC
1101 14TH STREET, NW
SUITE 500
WASHINGTON, DC 20005

EXAMINER

SHERMAN, STEPHEN G

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/661,587 | Applicant(s) HSU, KUO-JUNG | |
| | Examiner Stephen G. Sherman | Art Unit 2674 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9-6-05</u></p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|---|---|

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page 5, line 23 of the specification it is stated: "...thinner that..." The examiner suggests changing this to read: "...thinner *than* that...".

Appropriate correction is required.

Claim Objections

2. Claim 4 is objected to because of the following informalities: The claim recites of the receiving portion having a concave. The examiner assumes that the claim should recite of the receiving portion having a concave portion. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Cho (US 6,219,038).

Regarding claim 1, Cho discloses a notebook computer with a hidden touch pad (Figure 1, item 10), comprising:

a main portion including a housing portion (Figure 1, item 12),

wherein the housing portion has an internal surface having an receiving portion (Figure 2. The examiner interprets that since the touchpad shown in Figure 2 extends through the housing shown in Figure 1 labeled as item 70 in Figure 2, that the housing would have an internal surface and that the receiving portion shown in Figure 2 would be items 30 and 50, and that since these items are attached to item 70 that the housing would have a receiving portion.);

a display connected to the main portion in a rotatable manner (Figure 1, item 14);
and

a touch pad disposed onto the receiving portion (Figure 2, touch pad 20 is disposed on the receiving portions 30 and 50.).

Regarding claim 2, Cho discloses the notebook computer as claimed in claim 1, wherein the housing portion further includes an external surface (Figure 1, the housing can be seen to have an external surface.).

Regarding claim 4, Cho discloses the notebook computer as claimed in claim 1, wherein the receiving portion has a concave (Figure 2, item 30, part of the receiving portion, can be seen to have a concave portion item 32.).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cho (US 6,219,038).

Regarding claim 7, Cho discloses the notebook computer as claimed in claim 1.

Cho fails to teach of the notebook computer wherein the thickness of the receiving portion is about 0.5-0.8mm.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to make the thickness of the receiving portion between .5-.8 mm since a notebook computer is portable and it is important to have the overall size of the notebook computer be relatively small meaning that all the components located inside of the computer would also need to be small.

Regarding claim 8, Cho discloses the notebook computer as claimed in claim 1.

Cho fails to teach of the notebook computer wherein the difference between the thickness of the receiving portion and that of a portion, adjacent to the receiving portion, of the housing is about 0.7-1.0 mm.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to make the difference between the thickness of the receiving portion and that of a portion, adjacent to the receiving portion, of the housing to be about 0.7-1.0 mm because it is important for the housing to keep a relatively small size but still be thicker than other components in the computer such that the internal components are protected properly.

Regarding claim 9, Cho discloses the notebook computer as claimed in claim 1.

Cho fails to teach of the notebook computer wherein a ratio between the thickness of the receiving portion and the thickness a portion, adjacent to the receiving portion, of the housing is about 1/3-1/2.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to make the ratio between the thickness of the receiving portion and that of a portion, adjacent to the receiving portion, of the housing to be about 1/3-1/2 mm because it is important for the housing to keep a relatively small size but still be thicker than other components in the computer such that the internal components are protected properly.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cho (US 6,219,038) in view of Garner (US 6,501,462).

Regarding claim 3, Cho discloses the notebook computer as claimed in claim 2.

Cho fails to teach of a notebook computer wherein the housing further includes a flange on the external surface, and the flange surrounds the surface correspond to the receiving portion.

Garner discloses of a notebook computer wherein the housing further includes a flange on the external surface, and the flange surrounds the surface correspond to the receiving portion (Figure 1, item 39 and column 4, lines 5-12. The examiner interprets that item 39 is a flange which surround the touch pad portion item 35.).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to use the flange taught by Garner with the notebook computer taught by Cho in order to provide tactile feedback such that the touchpad can be found without looking for it with the eye.

9. Claims 5-6 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cho (US 6,219,038) in view of Keely, JR. et al. (US 2002/0063694).

Regarding claim 5, Cho discloses the notebook computer as claimed in claim 1.

Cho fails to teach of the notebook computer further comprising: an adhesive member adhering the touch pad to the receiving portion.

Keely, JR. et al. disclose of a notebook computer further comprising: an adhesive member adhering a touch pad to the outer surface opening (Paragraph [0041]).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to adhere the touch pad to the receiving portion using adhesive as taught by Keely, JR. et al. with the notebook computer taught by Cho in order to provide the desired stiffness, producing permanent alignment, shock control, the spread of impact forces along the edges, and liquid seal, with minimum cost, weight, and number of parts.

Regarding claim 6, Cho and Keely, JR. et al. disclose the notebook computer as claimed in claim 5. Keely, JR. et al. also discloses wherein the touch pad is closely

Art Unit: 2674

adjacent to the outer surface opening via the adhesive member, thereby eliminating any gap between the outer surface opening and the touch pad (Paragraph [0041]. The examiner interprets that when anything is sealed with an adhesive such that liquids are prevented from entering that the gap between the two items is eliminated.).

Regarding claim 10, this claim is rejected under the same rationale as claims 1 and 5.

Regarding claim 11, this claim is rejected under the same rationale as claims 5 and 6.

Regarding claim 12, this claim is rejected under the same rationale as claim 7.

Regarding claim 13, this claim is rejected under the same rationale as claim 8.

Regarding claim 14, this claim is rejected under the same rationale as claim 9.

Regarding claim 15, Cho and Keely, JR. et al. disclose the method as claimed in claim 10.

Cho and Keely, JR. et al. fail to teach of the method wherein the housing is formed by injection molding.

However, it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to form the housing using injection molding since it is well known that the injection molding process has high production rates, allows design flexibility, has relatively low labor, and has minimum scrap losses.

Regarding claim 16, this claim is rejected under the same rationale as claim 4.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ramey et al. (US 6,756,971) disclose a touch pad guard for protecting a touch pad.

Ward et al. (US 6,824,321) disclose a keypad assembly for a mobile device having single piece molded housings.


Frisch et al. (US 5,854,625) disclose a touch pad with a seal over the top for protection.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SS



PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER

24 January 2006